

## **CHAPTER III**

### **RESEARCH METHOD**

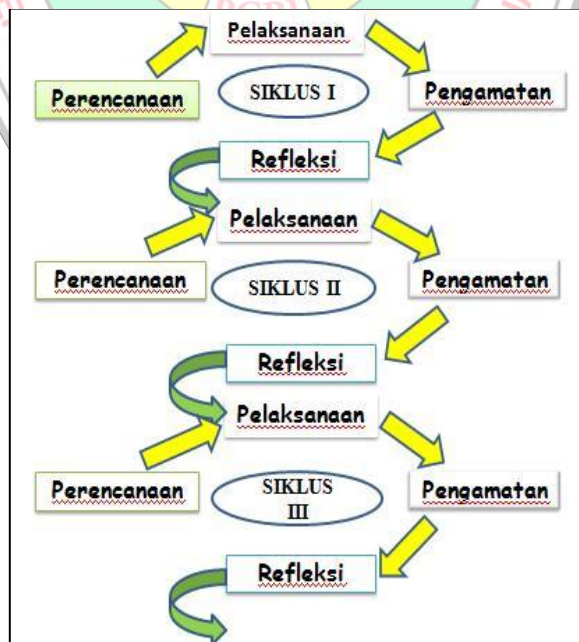
This chapter explained the research design, subject of the research, time of the research, research instruments, research procedures of Classroom Action Research (CAR), techniques of data collecting, and techniques of data analysis. An explanation regarding this was explained below.

#### **A. Research Design**

This research was Classroom Action Research (CAR). Classroom Action Research (CAR) usually used qualitative methods to determine the increase in students' scores and to determine the level of success of learning in the classroom (Kemmis et.al., 2014). Classroom Action Research (CAR) was carried out in the classroom with the aim of providing solutions related to the difficulties students experienced in learning. In this study, CAR aimed to provide solutions related to students' difficulties in writing descriptive text using the Four-square writing method.

Moreover, this Classroom Action Research (CAR) used a design from Kemmis and MC Taggart (in Nita Ernawati, 2013). Classroom Action Research activities included a repeating cycle. Each cycle consisted of four stages, namely: preparation, implementation, observation, and reflection. At the preparatory stage, the researcher prepared all the equipment used during the research. Some things that needed to be prepared before carrying out research included lesson plans, student attendance, pre-test and post-test worksheets, and observation sheets.

The second stage was implementation. At this stage, the researcher provided treatment and tests based on the design of learning activities. The third stage was observation. At this stage, the researcher made observations of students during the learning process. Student observations included attention, activeness, enthusiasm, and problems faced by students. The final stage was reflection. At this stage, the researcher reflected and evaluated the results of the research that had been carried out in cycle I. If there was no improvement in cycle I, the researcher continued in cycle II. If in cycle II, an increase had been found in students who met the standards of success, then the research was considered successful. However, if there had not been an increase in cycle II, the researcher would continue the research until an increase in students' abilities was found. The following was an illustration of implementing Classroom Action Research by Kemmis and MC Taggart.



**Figure 1** Kemmis and Mc Taggart Model of Classroom Action research

## B. The Subjects of the Research

This research was conducted at Pacitan 2 Vocational High School, which was located at Jalan Letjen Suprpto Number 53, Barehan, Ploso, Pacitan District, Pacitan Regency, East Java Province 63515. The researcher chose class X as the subject of this study due to several reasons, including the researcher had carried out observations related to the difficulties experienced by students in class X. Previously, most students experienced difficulties related to writing descriptive text, applying the method to class X would facilitate their learning at the next level. They needed a variety of methods to increase their learning enthusiasm. The subject of this research was mentioned in the table below.

**Table 1** List of students Accounting 4 SMKN 2 Pacitan

No	Name	Gender	Class
1.	Raya Akbar Fitria	Male	X AKL 4
2.	Regan Alysia Anggoro Putra	Male	
3.	Resma Hidayanti	Female	
4.	Restiandini Damayanti	Female	
5.	Rezky Bayu Diandra	Male	
6.	Rheyra Restiana	Female	
7.	Ririn Aprilia Putri	Female	
8.	Rista Dwi Rahayu	Female	
9.	Rizal Dhani Ramadhan	Male	
10.	Sabrina Febrianti	Female	
11.	Salbina Putri Keysa	Female	
12.	Sasqia Refalina	Female	
13.	Shafira Sukma Aji	Female	

14.	Sheptyaddin Bangun Asmoro	Male
15.	Sherly Andini Hapsari	Female
16.	Shesilia Ananda Aprilia	Female
17.	Tefi Setianingsih	Female
18.	Tika Nurauliya	Female
19.	Tiockta Fitran Suryatama	Male
20.	Tri Makrifatul Maffiah	Female
21.	Vania Zahwa Nirmala Putri	Female
22.	Velysa Nur Mutia	Female
23.	Venia Aulia Handini	Female
24.	Vina Anggraini	Female
25.	Wahyu Setyaningsih	Female
26.	Wildhan Rafiadmaja	Male
27.	Windhi Widianingsih	Female
28.	Wisnu Wahyu Santoso	Male
29.	Yola Ayu Amanda	Female
30.	Yuan Sastya Ayu	Female
31.	Yuyun Kusuma Ningrum	Female
32.	Zulfa Ghaisani Dalilah	Female

### C. Time of the Research

Research times were the total time needed by the researcher starting from before the research was carried out until the thesis exam. The time for this research included observation; research preparation and submission; submitting proposals; proposal seminars; research approval; treatment and collecting data; data analysis; report arrangement; submitting the thesis, and

thesis examination. The research time started from September 2022 to July 2023. An explanation regarding the research time was in the table below.

**Table 2** Time of the Research

No	Activities	Time							
		Sept	Oct	Nov	Des	Jan	Feb	Mar	Apr
1.	Observation	■	■						
2.	Research preparation and submission		■	■	■				
3.	Submitting proposal					■			
4.	Seminar proposal					■			
5.	Research approval					■	■		
6.	Doing treatment and gathering data						■	■	
7.	Data analysis							■	
8.	Reports arrangement								■

#### **D. Research Instruments**

There were some of the instruments needed during the research carried out. In this study, the research instruments included: a lesson plan, pre-test and post-test worksheets, observation sheets, questionnaires, and documentation. Explanations related to the research instrument were described in the following explanation.

##### **1. Lesson plan**

The lesson plan was in the form of sheets containing material, learning techniques, and student assessments. This lesson plan includes all of the material and learning techniques that have been done in 2

cycles. This lesson plan aims to make it easier for the researcher to conduct research in the classroom.

## **2. Pre-test and post-test worksheets**

The pre-test and post-test were in the form of question sheets, each of which had a different theme. The pre-test and post-test worksheets not only contain questions but also contain instructions for working on the questions, and assessment criteria both before and after the treatment was given. The pre-test and post-test were done individually and according to the results of their own thoughts (not plagiarism of other people's work).

## **3. Observation sheets**

Observation sheets were in the form of sheets that contain statements relating to the teaching-learning process in class during the application of the four-square writing method. Observation sheets consist of teacher observation sheets and student observation sheets. The teacher's observation sheets aim to find out how the learning process during the application of the four-square writing method given by the researcher. While the students' observation sheets aim to determine student responses to the application of the four-square writing method in improving students' writing skills to write a descriptive text. Observation sheets were also used as indicators of success in applying the four-square writing method to attention, activeness, enthusiasm, and problems faced by students during teaching and learning activities in class.

#### **4. Questionnaires**

Questionnaires used Google Forms as a medium. Questionnaires were a collection of questions related to students' responses regarding the application of the four-square writing method which consists of 10 questions and is divided into 4 categories. The researcher gave questionnaires after the treatment was completed. This aims to determine the student's response after applying the four-square writing method in improving students' writing skills to write a descriptive text.

#### **5. Documentation**

Documentation is done using a mobile phone and in the form of a collection of photos during the teaching and learning activities. The contents of this documentation are photos of student activities in class, pre-test and post-test worksheets, and observation sheets. Documentations aim to provide a visualization related to implementing the four-square writing method during teaching and learning activities in class.

#### **E. Research Procedures at Classroom Action Research (CAR)**

Classroom Action Research was research that was carried out in the classroom with repeated cycles. Each cycle consists of 4 activities, namely: preparation, implementation, observation, and reflection. In this study, the researcher carried out two cycles of research. The following was a further explanation regarding Classroom action research procedures.

## 1. The procedure of cycle I

There were four activities carried out in cycle I, namely: preparation, implementation, observation, and reflection:

### a. Preparation

Preparation several things that need to be prepared in the implementation of cycle 1 were:

- 1) The researcher prepared lesson plans;
- 2) The researcher prepared pre-test and post-test questions;
- 3) The researcher prepared the attendance list of students;
- 4) The researcher prepared student and teacher observation sheets.

### b. Implementation

At the implementation stage, it includes all activities carried out by the teacher during the teaching and learning process which were divided into 3, namely:

- 1) Pre-activities
  - a) The researcher greets and checks the attendance of the students;
  - b) The researcher delivers the aims and objectives of the implementation of this research;
- 2) Main activities
  - a) The researcher gave a pre-test to students before treatment is given;
  - b) Students collected their work in front of the class;



- c) The researcher gave treatment to students regarding the use of the four square writing method in writing descriptive text;
- d) The researcher gave students the opportunity to ask questions related to the four-square writing method;
- e) The researcher gave post-test to students;
- f) Students collected post-test results in front of the class.

3) Post-activities

- a) The researcher and students conclude the material that had been studied;
- b) The researcher ends the lesson by greeting.

c. Observation

At this stage, the activities carried out include:

- 1) The researcher observed students during teaching and learning activities;
- 2) The researcher compared the pre-test scores with the students' post-test scores to find out the comparison of student scores before and after being given treatment.

d. Reflection

At the reflection stage, the researcher analyzed the results of student observations in class and the results of student tests. If the results of observations and student test scores were not fulfilled, then some of the activities carried out include:

- 1) The researcher analyzed the problems faced by students and find solutions;
  - 2) preparing cycle II research instruments;
2. The procedure of cycle 2

Because in cycle I the students' abilities and enthusiasm in learning had not increased according to the standards of success, the researcher continued to cycle II. As in cycle I, there are 4 activities carried out by students, namely: preparation, implementation, observation, and reflection.

a. Preparation

In preparation, several things need to be prepared in the implementation of cycle II were:

- 1) The researcher prepared lesson plans;
- 2) The researcher prepared pre-test and post-test questions;
- 3) The researcher prepared the attendance list of students;
- 4) The researcher prepared student and teacher observation sheets.

b. Implementation

At the implementation stage, it includes all activities carried out by the teacher during the teaching and learning process which were divided into 3, namely:

- 1) Pre-activities
  - a) The researcher greets and checks the attendance of the students;

b) The researcher delivers the aims and objectives of the implementation of this research;

2) Main activities

a) The researcher gave treatment to students regarding the use of the four square writing method in writing descriptive text;

b) The researcher gave students the opportunity to ask questions related to the four-square writing method;

c) The researcher gave post-test to students;

d) Students collected post-test results in front of the class.

3) Post-activities

a) The researcher gave a questionnaire via Google form to students regarding the use of the four-square writing method;

b) The researcher ends the lesson by greeting.

c. Observation

At this stage, the activities carried out include:

1) The researcher observed students during teaching and learning activities;

2) The researcher compared the scores of the students' post-test I with the scores of the students' post-test II to find out the comparison of students' scores before and after being given treatment.

#### d. Reflection

At the reflection stage, some of the activities carried out by the researcher include:

- 1) The researcher analyzed the results of observations, questionnaires, and student tests;
- 2) The researcher analyzed the comparison of the post-test I score with post-test II;

#### F. Techniques of Data Collecting

The data collection technique used in this study uses two methods, namely quantitative and qualitative. Quantitative data collection techniques were using pre-test and post-test worksheets, while qualitative data collection techniques were in the form of observations and questionnaires.

##### 1. Pre-test and post-test worksheets

The pre-test was given before the treatment. The pre-test aims to find out the problems students experience in writing descriptive text. While the post-test was given after the treatment is carried out. The post-test was intended to determine the increase in students' abilities. post-test was given at the end of each cycle and as a determinant related to stopping or continuing the research.

##### 2. Observations

The researcher made observations during teaching and learning activities take place. Observations aimed at knowing students' responses to the use of the four-square writing method in improving their ability to

write descriptive texts in class. In addition, the observation also aims to determine the impact of using the four-square writing method on student enthusiasm in class.

### 3. Questionnaires

Questionnaires were given after all cycles had been carried out. Questionnaires aim to find out students' responses after using the four-square writing method in improving their writing skills. In addition, questionnaires can also be a determinant of the success or failure of this method to enhance students' abilities because students fill out questionnaires according to the actual situation.

## G. Techniques of Data Analysis

Techniques of data analysis were the process of compiling and explaining data. The researcher explains the data that had been collected. In this study, data were analyzed based on two methods, namely the quantitative method in the form of student test results and the qualitative method in the form of observations and questionnaires..

### 1. Data Analysis of Quantitative Data

The Data analysis techniques were the process of compiling and explaining data. The researcher explains the data that has been collected. In this study, data were analyzed based on two methods, namely the quantitative method in the form of student test results and the qualitative method in the form of observations and questionnaires.

**Table 3** Criteria Standards of Completeness

Aspect	Level	Score	Criteria
Content 30%	Excellent – Very Good	30-27	Relevant to the topic, give the detail information, and match the purpose of the text.
	Good – Average	26-22	Mostly relevant to the topic, lacks of detail.
	Fair - Poor	21-17	Inadequate development of the topic, almost match to the purpose of the text.
	Very poor	16-13	Does not relate to the topic and does not match the purpose.
Organization 20%	Excellent – Very Good	20-18	Fluent expression, ideas clearly stated, well organized, logical sequencing cohesive.
	Good – Average	17-14	Loosely organized, limited support, logical but incomplete sequencing.
	Fair - Poor	13-10	Non-fluent, ideas confused or unconnected, lacks logical development and sequencing.
	Very poor	9-7	Does not communicate, no organization, not enough to evaluate.
Vocabulary 20%	Excellent – Very Good	20-18	Use effective word/word choice/word usage, word form mastery.
	Good – Average	17-14	Occasional errors of word form, choice/word usage but meaning not obscured.
	Fair - Poor	13-10	Frequent errors of word form, choice, usage and meaning obscured/confused.
	Very poor	9-7	Essentially translation, little knowledge of English, not enough to evaluate.
Language use 25%	Excellent – Very Good	25-22	Few errors of agreement, tense, and word order.
	Good – Average	21-18	Several errors of agreement, tense, and word order.
	Fair - Poor	17-11	Frequent errors and meaning obscured.
	Very poor	10-5	Dominated by error, does not communicate, not enough to evaluate.

Mechanics 5%	Excellent – Very Good	5	Exemplary mechanism, may have minor errors in punctuation, capitalization, and spelling, need little or no editing.
	Good – Average	4	Adequate mechanism, have some errors in punctuation, capitalization, and spelling, need editing but does not impede readability.
	Fair - Poor	3	Limited mechanism, consistent errors of punctuation, capitalization, and spelling, impede readability.
	Very poor	2	Inadequate mechanism, serious and consistent errors in punctuation, capitalization, and spelling impedes understanding / communication.

Jacobs et al.'s (1981) scoring profile

In the process to produce the good descriptive writing, Weigle elaborates based on the Jacobs's scoring profile that there were some skills which should be concerned as follows:

**a. Content**

A content includes the topic and its explanation, discussion, evaluation, and conclusion. It should be clear, specific, and relevant.

The good content had to fulfill the criteria such as full of information, substantive made a clear thesis development and relevant with the problem. Related to this point, students were expected to have some abilities as follows:

- 1) Students should be able to write and relate the ideas.
- 2) Students should be able to develop the ideas.

- 3) Students should be able to use the appropriate description, to explain the topic.

**b. Organization**

An organization was also important skill which should be mastered to write the descriptive text. Organization means that how the students organize their ideas. The students were expected to had some skills as follows in order to organize the descriptive writing:

- 1) Students should be able to write an effective introduction.
- 2) Students should be able to write an effective description of the topic.
- 3) Students should be able to draw the conclusion.

**c. Vocabulary**

Vocabulary was the most important thing that forms a phrase, sentence, and paragraph. In writing, a writer should use the appropriate vocabulary to express what they want to write. Vocabulary mastery was needed in order to create an understandable descriptive writing. The detail skills about vocabulary to write descriptive writing were mentioned as follows:

- 1) Students should be able to mastery the list of noun, adjective, verb, and adverb.
- 2) Students should be able to use the plural and singular noun in sentences.



#### **d. Language Use**

Language Use refers to the communicative meaning of language. In writing process refers to the rules for making sentences or paragraph grammatically. Grammar was the study of words and the ways word work together to form a sentence. Tenses and structure mastery really important to have paragraph constructed. It was difficult for students to arrange a good paragraph if the students do not understand well about tenses and structure mastery. They were expected to have abilities about language use as follows:

- 1) Students should be able to understand the word order.
- 2) Students should be able to mastery the subject-verb agreement.
- 3) Students should be able to understand the tenses that used in descriptive writing.

#### **e. Mechanics**

Mechanics was also the significant part of writing. The skills which should be comprehended by students about mechanics were mentioned as follows:

- 1) Students should be able to write the correct spelling.
- 2) Students should be able to use the correct punctuation.
- 3) Students should be able to write the neatly.

Therefore, there were many skills which should be comprehended by the students to write descriptive writing. All the skills should be

mastered and applied well during the writing process in order to write a good descriptive writing.

The student's scores were calculated using the formula by Purwanto (in Alike et.al., 2016).

$$NP = \frac{R}{SM} \times 100$$

Details :

- NP** : students score
- R** : scores obtained by students
- 100** : scale used
- SM** : score to be achieve in a test

Then the researcher calculated the average student scores using the formula from Hatch and Farhady (in Togero et.al., 2014).

$$\bar{X} = \frac{\sum x}{N}$$

Detail :

- $\bar{X}$  : students average score
- $\sum x$  : Student's Score
- N** : Number of students

## 2. Data Analysis of Qualitative Data

Qualitative data analysis in this study was based on the results of student observations and questionnaires. The researcher made observations of students during the teaching and learning process in the class. While the questionnaires were given when the treatment was completed. These two data were used to determine the effect of using the four-square writing

method in improving students' writing skills and students' enthusiasm in class.

In analyzing qualitative data, the researcher used an interactive analysis model from Miles and Huberman (in Miles, Huberman and Saldana, 2014: 14).

The components of interactive model data analysis were described as follows:



**Figure 2** Data Analysis Of Miles And Huberman's Interactive Model (2014)

The components of interactive model data analysis were described as follows:

a. Data reduction

In the reduction stage, the researcher focused on the teaching-learning process in the classroom from pre-activities to post-activities. Data reduction was the stage of selecting, focusing, simplifying, and removing unnecessary (Miles, Huberman & Saldana; 2014). The data is in the form of student observation notes and the results of questionnaires which were then described.

b. Display data

At the data display stage, the researcher displays data related to the results of student observations during teaching and learning activities related to the use of the four-square writing method and the results of the questionnaires after all treatments had been given. The

results of student observations were displayed in the form of tables while the appearance of data questionnaires was in the form of pies and descriptive text as an explanation.

c. Drawing the conclusion

The final stage according to Miles and Huberman (2014) was the drawing the conclusion. In the previous stage, data from student observations and questionnaires were displayed. From the display the data, is then analyzed to provide conclusions. The conclusion was a short sentence that describes the entire contents of the data.

